abcam

Product datasheet

Anti-Caveolin-1 antibody ab36152

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Overview

Immunogen

Product name Anti-Caveolin-1 antibody

Description Goat polyclonal to Caveolin-1

Host species Goat

Specificity No cross-reactivity expected to Caveolin-2 and Caveolin-3.

Tested applications Suitable for: Flow Cyt (Intra), ICC, WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Dog, Pig

Synthetic peptide corresponding to Human Caveolin-1 aa 33-44 (internal sequence).

Sequence:

DELSEKQVYDAH

Database link: Q03135

Run BLAST with
Run BLAST with

Positive control ICC: U-2 OS and A431 cells; WB: A549 and A431 cell lysates. Human heart tissue lysate. Flow

Cyt (Intra): HeLa cells.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.30

Preservative: 0.02% Sodium azide

Constituent: 0.5% BSA

Purity Immunogen affinity purified

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Purification notesPurified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

Clonality Polyclonal

Isotype IgG

Applications

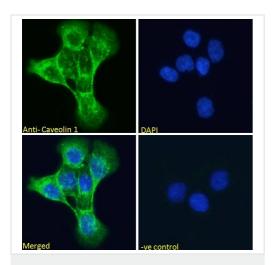
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab36152 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use a concentration of 10 μg/ml.
ICC		Use a concentration of 10 μg/ml.
WB	★★★★★ (3)	Use a concentration of 0.001 - 0.01 µg/ml. Detects a band of approximately 21, 25 kDa (predicted molecular weight: 20 kDa). 1 hour primary incubation is recommended for this product.

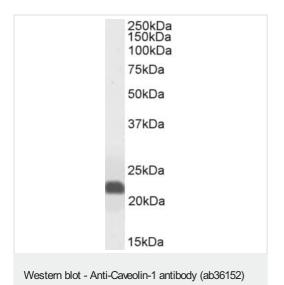
Target		
Function	May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway.	
Tissue specificity	Expressed in muscle and lung, less so in liver, brain and kidney.	
Involvement in disease	Defects in CAV1 are the cause of congenital generalized lipodystrophy type 3 (CGL3) [MIM:612526]; also called Berardinelli-Seip congenital lipodystrophy type 3 (BSCL3). Congenital generalized lipodystrophies are autosomal recessive disorders characterized by a near absence of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and early onset of diabetes.	
Sequence similarities	Belongs to the caveolin family.	
Post-translational modifications	The initiator methionine for isoform Beta is removed during or just after translation. The new N-terminal amino acid is then N-acetylated.	
Cellular localization	Golgi apparatus membrane. Cell membrane. Membrane > caveola. Membrane raft. Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.	

Images



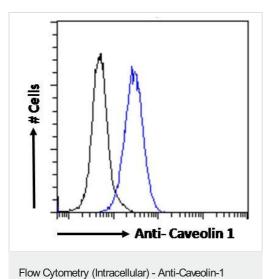
Immunocytochemistry - Anti-Caveolin-1 antibody (ab36152)

Immunocytochemistry analysis of paraformaldehyde fixed A431 (human epidermoid carcinoma cell line) cells labeling Caveolin-1 with ab36152 at 10 μ g/mL. Cells permeabilized with 0.15% Triton. Primary incubation for 1 hour followed by Alexa Fluor 488 secondary antibody at 2 μ g/mL (green). The nuclear stain is DAPI (blue). Negative control: Unimmunized goat lgG (10 μ g/mL) followed by Alexa Fluor 488 secondary antibody at 2 μ g/mL.



Anti-Caveolin-1 antibody (ab36152) at 0.003 $\mu g/ml$ + Human Heart lysate at 35 μg

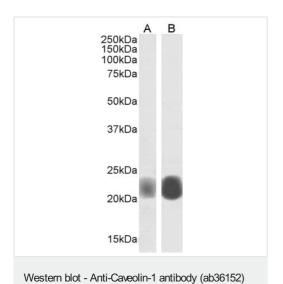
Predicted band size: 20 kDa



antibody (ab36152)

Flow Cytometry (Intracellular) analysis of paraformal dehyde fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling Caveolin-1 with ab36152 at 10 μ g/mL (blue line). Cells permeabilized with 0.5% Triton. Primary incubation overnight followed by Alexa Fluor 488 secondary antibody at 1 μ g/mL.

lgG control: Unimmunized goat lgG (black line) followed by Alexa Fluor $^{\!(\!R\!)}$ 488 secondary antibody.

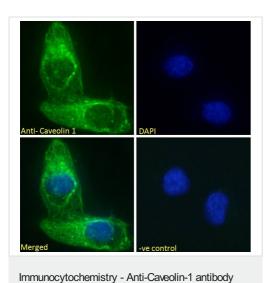


Lane 1 : Anti-Caveolin-1 antibody (ab36152) at 0.003 μg/ml **Lane 2 :** Anti-Caveolin-1 antibody (ab36152) at 0.001 μg/ml

Lane 1 : A431 cell lysate Lane 2 : A549 cell lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 20 kDa



(ab36152)

Immunocytochemistry analysis of paraformaldehyde fixed U-2 OS (human bone osteosarcoma epithelial cell line) cells labeling Caveolin-1 with ab36152 at 10 μ g/mL. Cells permeabilized with 0.15% Triton. Primary incubation for 1 hour followed by Alexa Fluor[®] 488 secondary antibody at 2 μ g/mL (green). The nuclear stain is DAPI (blue). Negative control: Unimmunized goat lgG (10 μ g/mL) followed by Alexa Fluor[®] 488 secondary antibody at 2 μ g/mL.

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